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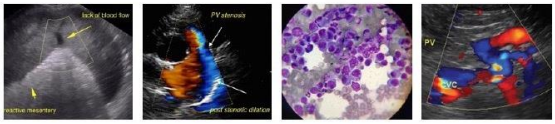

THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

**PATIENT**

Willow Brown

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

FS

**AGE**

7 years

**WEIGHT**

66 lbs.

**INTERPRETED BY**

R. McKenzie Daniel, DVM, DABVP

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Southside Pet Hospital

**REFERRING VET**

Dr. Velez

**INVOICE**

17316

**DATE**

7/20/23

## PRESENTING CLINICAL SIGNS

Mild generalized muscle mass loss, worse over thighs and parietal region. Has not been on any meds. US to check on kidneys and liver health.

Abnormal PE/Chem/CBC/UA Results: Calcium 1.9mmol/L, Potassium 3.8 mmol/L, TP 37g/L, Albumin 16g/L, Globulins 21 g/L, Lipase 275 IU/L.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 5.8 cm in length. The right kidney measured 6.3 cm in length.

### *Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.2 cm length x 0.54 cm width at the caudal pole. The right adrenal gland was overtly normal in size, position, and shape. The right adrenal gland subjectively measured 1.5 cm length x 0.58 cm width at the caudal pole.

### *Spleen*

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

### *Liver/ Gallbladder*

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. Subjective adequate to normal hepatic vascular volume was noted.

The gallbladder was non-distended in size containing anechoic content with mild echogenic gallbladder sediment. No evidence of inflammatory criteria was noted. The cystic and common bile ducts were normal.

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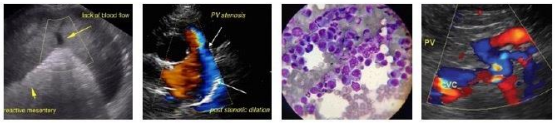

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### *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed fecal matter in lumen.

### *Pancreas*

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

### *Free Abdomen*

No omental masses, lymphadenopathy, or evidence of peritoneal effusion were noted.

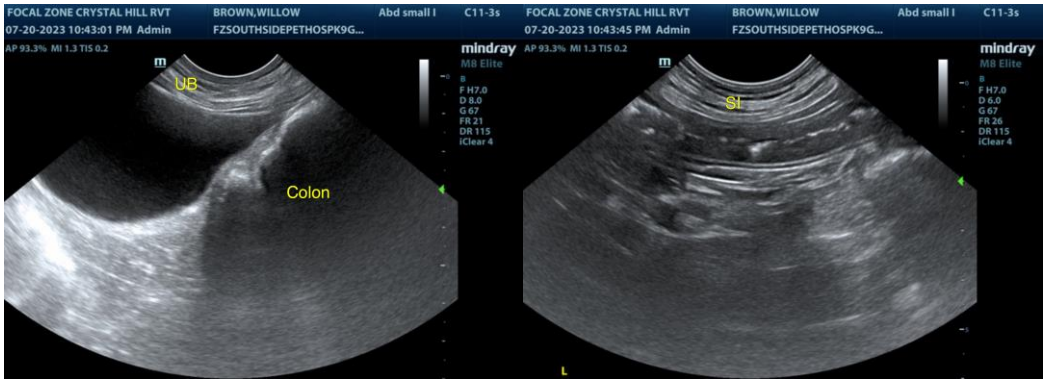
## ULTRASONOGRAPHIC FINDINGS

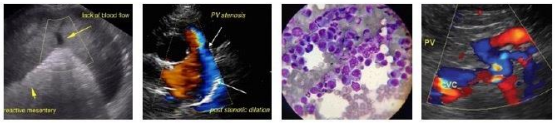
- Overtly normal gastrointestinal tract / colon
- Normal volume liver
- Mild gallbladder sediment (non mucocele)
- Normal bilateral kidneys

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Sonographically, there was no evidence of visceral pathology as an obvious cause of the patient's loss of muscle mass and hypoproteinemia / hypocalcemia.

Given no evidence of hepatic pathology and assuming no significant proteinuria on UA, nonstructural intestinal disease in light of loss of muscle mass and panhypoproteinemia could be possible. Further assessment may include full UA with baseline UPC level, as well as a GI panel to include PLI/TLI/Cobalamin/Folate. No evidence of intrabdominal neoplastic criteria was noted.







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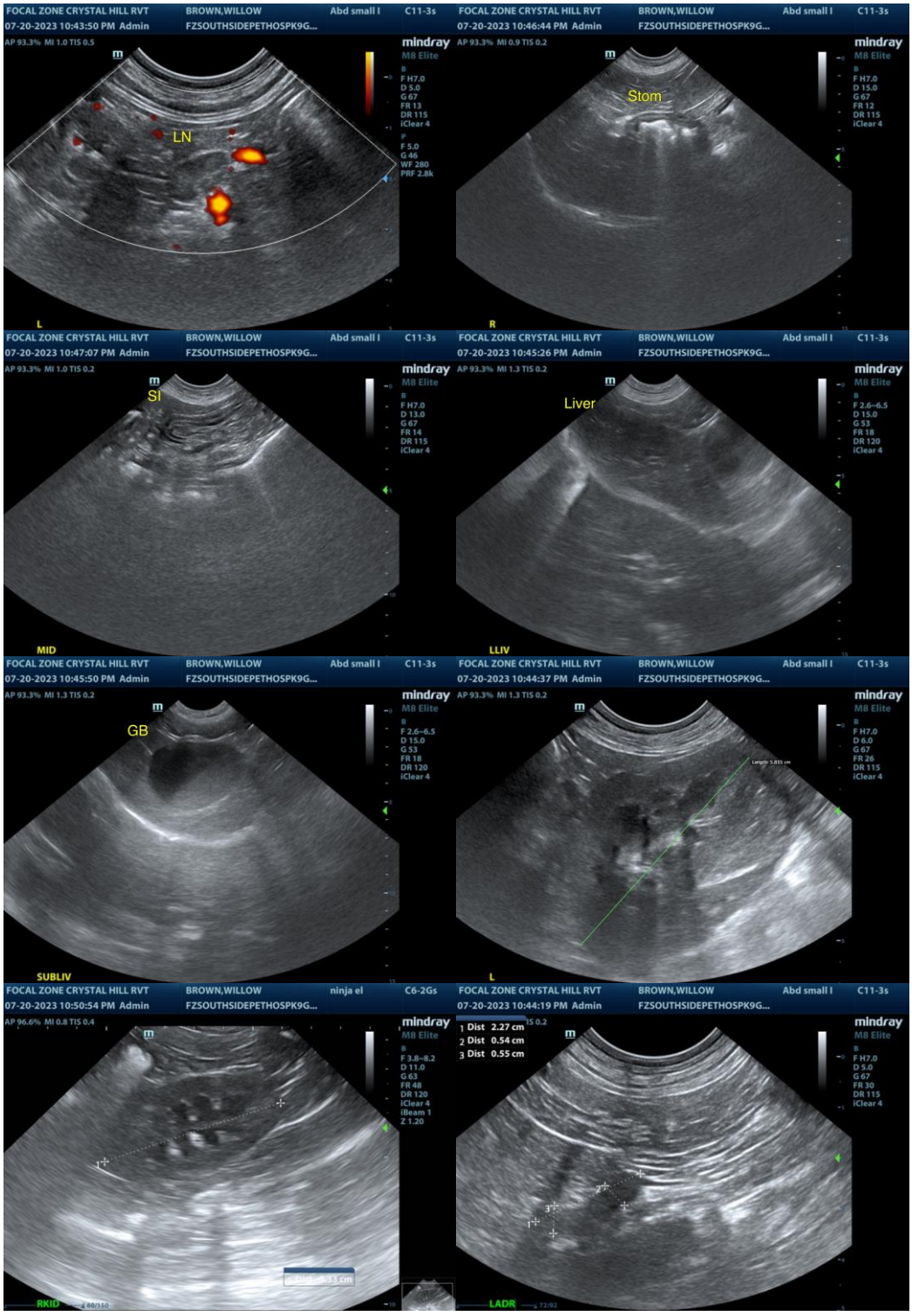


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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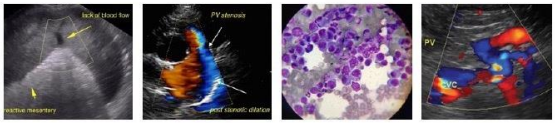

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Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**
**info@SonoPath.com**